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(54) CONTINUOUSLY VARIABLE TRANSMISSION
LIQUID FREE FROM ZINC

(57) Abstract:

PROBLEM TO BE SOLVED: To obtain a zinc-free lubricant oil that has an ability to give a high steel-steel friction factor and is useful for variable speed transmission by adding a large amount of lubricant and a specific enhancing additive.

SOLUTION: This objective lubricant composition is prepared by using (A) a large amount of lubricant and (B) the performance-enhancing mixture

comprising (i) a polyisobutenenyl succinimide ash-free dispersant with the number average molecular weight of polyisobutenyl group of 700-1,200; (ii) an organic phosphite of formula I (R is a hydrocarbyl, H; R1 is a hydrocarbyl; R or R1 may includes thioether); (iii) a calcium perbasic phenate washing agent in an concentration enough to keep the calcium \leq about 5,000 ppm in the fluid; (iv) a friction improving agent that including a succinimide of formula II (R7 is a 6-30 alkyl; z is 1-10) and an ethoxylated amine and (v) a primary amine amide of a long-chain carboxylic acid.

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